

Claims

1. A device for damping vibrations in a steering wheel, said device comprising a damping means²², an attenuation mass⁴⁰ connected with said damping means²² and an electrical control unit²⁶ coupled with said damping means²², said control unit being able to alter mechanical vibration characteristics of said device such that different vibration frequencies can be damped.

2. The device according to Claim 1, wherein said damping means²² is designed such that said mechanical vibration characteristics of said device can be altered by supplying electrical energy to said damping means²².

3. The device according to Claim 1, wherein a sensor²⁸ is provided, through which said control unit²⁶ receives data regarding said vibrations of said steering wheel.

4. The device according to Claim 2, wherein said damping means²² comprises a material which alters its mechanical characteristics with said supply of electrical energy.

5. The device according to Claim 4, wherein said material is an electrically conductive elastomer.

6. The device according to Claim 4, wherein said material⁴² is an electrorheological fluid.

7. The device according to Claim 1, wherein said damping means comprises a bimetal strip.

8. The device according to Claim 1, wherein said damping means comprises a damping body and a magnet surrounding said damping body.

9. The device according to Claim 8, wherein said magnet is an electromagnet.

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10. The device according to Claim 9, wherein said damping body contains an electrically conductive elastomer.

11. The device according to Claim 9, wherein said damping body contains a magnetorheological fluid.

5 (12)²⁴ The device according to Claim 1, wherein said damping body is a
 ³⁶hollow body made of an elastic material.

 (13)³⁶ The device according to Claim 12, wherein said hollow body is
ring-shaped.

10 (14)⁴⁰ The device according to Claim 12, wherein a mass core acting as
 ³⁶said attenuation mass is incorporated in said hollow body.

 (15)³⁶ The device according to Claim 12, wherein said hollow body
contains one of an electrorheological and magnetorheological fluid.

16. The device according to Claim 1, wherein said attenuation mass is a gas generator.

15 17. The device according to Claim 1, wherein said attenuation mass is a gas bag module.

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